

Independent Environmental Audit Western Coal Services 5/02/2016

Response to the Western Coal Services independent environmental audit recommendations including timing

REC Number	Recommendation	Response	Timing
REC-2016-1	WCS apply for a standalone Environmental Protection Licence so that monitoring requirements are consistent with the criteria specified in PA SSD-5579.	Centennial's Western Coal Services currently operate in accordance with an existing Environmental Protection Licence EPL 3607. Centennial have initiated discussions with the Environment Protection Authority (EPA) in relation to applications for new EPL's for Centennial's Western Coal Services and Springvale Mine operations.	Centennial have commenced negotiations with the EPA regarding separation of the EPL. Timing is contingent on completion and submission of the Upper Cocks River Action and Monitoring Plan to be submitted to the Secretary for approval by 30 September 2016.
REC-2016-2	That the structure of current management plans be improved so as to highlight management actions and mitigation measures that can be easily identified, implemented and audited against. This could include having a table or Section listing all of the management I mitigation measures required as part of the plan (similar to the TARPs in the Water Management and Rehabilitation and Closure Management Plans).	Future revision of management plans will follow the appropriate Centennial template for management plans.	The timing of reviews is determined by the Environmental Management System. Each plan will be reviewed as it becomes due.
REC-2016-3	That WCS request third parties that write management plans use the MOP and EIS for consistency of naming conventions or site areas (i.e. Domains) as well as monitoring locations. WCS should also ensure that document control is included on internally and externally prepared management plans.	Future revision of management plans will follow the appropriate Centennial template for management plans.	Ongoing.
REC-2016-4	That roles and responsibilities for implementing monitoring and mitigation measures are stated within the early stages of the plans.	Future revision of management plans will follow the appropriate Centennial template for management plans.	Ongoing.
REC-2016-5	That integration between the EMS, the Strategy and the management plans is improved. Each plan should outline its strategic context in line with the WCS EMS, the Strategy and Centennial Coal's Standards.	The next revision of the Environmental Management Strategy will follow the Centennial template for Environmental Management Systems.	The strategy is due for review in September 2017.
REC-2016-6	Update the Air Quality Management Plan to reflect actual measures that are implemented rather than proposed. Also include the location of air monitoring equipment.	The Western Regional Air Quality Management Plan was submitted to DPE on the 11 February 2016.	Submitted on 11 February 2016.
REC-2016-7	Update the Plans/Figures appended to the PIRMP to clearly and legibly show the location of potential pollutants on the premises. Ensure the cross referencing of Figures correlates with those included in the PIRMP.	A revision of the PIRMP is scheduled to occur in April 2016.	The PIRMP was reviewed in April 2016. To be uploaded to website in June 2016.
REC-2016-8	Update the PIRMP to reflect roles and responsibilities.	A revision of the PIRMP is scheduled to occur in April 2016.	The PIRMP was reviewed in April 2016. To be uploaded to website in June 2016.
REC-2016-9	Sediment and erosion controls should be improved in accordance with the Managing urban stormwater: soils and construction (Landcom, 2004) on the OL-3 ridge to minimise the potential for undermining of OL-3 footings and to better control surface water run-off towards the OL-3 I OL-4 transfer point (Refer to Photo 4-21).	An investigation to determine the appropriate control measure will be undertaken and implemented.	July 2016.
REC-2016-10	Until a longer term plan for the use of the Kerosene Vale stockpile area is agreed (within Centennial and/or with DRE) sediment and erosion controls should be installed on the exposed stockpile pad to stabilise the area and reduce the sediment load at the flocculation station and LDP-003.	An investigation to determine the appropriate control measure will be undertaken and implemented.	July 2016.
REC-2016-11	That the Water Management Plan be fully reviewed and updated as was reported by WCS to be occurring. The revised Water Management Plan should review and include mitigation measures for groundwater seepage into Cook and DML dams.	Strategies and actions for the management of groundwater will be included in the revised water management plan.	This is included in investigations under the Upper Cocks River Action and Monitoring Plan, to be submitted to the Secretary for approval by 30 September 2016. A revised Water Management Plan for the Western Coal Services Site anticipated to be completed by 31 December 2016.

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REC-2016-12	The revised Water Management Plan should provide a broader context for the management of saline discharges in the region and provide specific guidance to WCS for discharges at LDP-006.	The management of saline discharges will be considered within individual site plan that forms part of the Regional Water Management Plan.	This is included in investigations under the Upper Cocks River Action and Monitoring Plan, to be submitted to the Secretary for approval by 30 September 2016. A revised Water Management Plan for the Western Coal Services Site anticipated to be completed by 31 December 2016.
REC-2016-13	The management of the seepage on Castlereagh Highway should be addressed including finalising the draft GHD report; and implementing the GHD recommendations and agreed options.	The control measures are being assessed by GHD for their efficiency and constructability.	Current water management has resulted in the cessation of this seepage. It will continue to be monitored weekly.
REC-2016-14	Consideration should be given to the long term management of water discharging from LDP-006, including post closure.	The long term management of water discharging from LDP006 will be considered in a site closure plan.	This is included in investigations under the Upper Cocks River Action and Monitoring Plan, to be submitted to the Secretary for approval by 30 September 2016. A revised Water Management Plan for the Western Coal Services Site anticipated to be completed by 31 December 2016.
REC-2016-15	The monitoring of discharges at LDP-006 should include eco-toxicology to assess the impacts of the site discharge on biota in Neubecks (Wangcol) Creek	An eco-toxicology assessment will be conducted on the LDP06 discharge waters by November 2016. To date there have been ten bi- annual aquatic ecology monitoring survey reports for Springvale Coal in the Wangcol Creek study area between Autumn 2010 and Autumn 2015.	The ecotoxicological review is part of the Upper Cocks River Action and Monitoring Plan to be submitted to the Secretary for approval by 30 September 2016.
REC-2016-16	The review, consideration and implementation of strategies to manage and mitigate the continued noise exceedances from the development. Mitigation works to address noise exceedances should be expedited.	Global Acoustics has been engaged to prepare a noise model of Centennials operations in the Lidsdale and Wallerawang area. The efficiency of various noise attenuation controls	Modelling is complete. Centennial will consult with DPE in June or July 2016 to discuss findings and proposed actions from this review.
REC-2016-17	Implementation of Centennial's Regional Noise Monitoring Plan should be expedited.	On the 11 February 2016 the Regional Noise Monitoring Plan was submitted to DPE for approval.	Complete.
REC-2016-18	At the next revision of the Noise Management Plan include the specific noise mitigation measures that apply to the WCS as developed from specialist reports to develop appropriate mitigation measures (subject to implementation of the regional Centennial Noise Monitoring Plan).	Specific noise mitigation measures that apply to the WCS will be incorporated into the next revision of the regional noise management plan where considered feasible.	Modelling is complete. Centennial will consult with DPE in June or July 2016 to discuss findings and proposed actions from this review.
REC-2016-19a	The recommendations provided in the 2015 Annual Rehabilitation Monitoring Report (AECOM, 2015, p.34) should be implemented as a priority.	Recommendations will be incorporated into annual maintenance programs.	Rehabilitation Monitoring Reports are considered in annual rehabilitation planning, each subsequent annual monitoring, and in The Western Coal Services Rehabilitation and Closure Plan. The Rehabilitation and Closure Plan is scheduled for review in September 2017.
REC-2016-19b	The Rehabilitation and Closure Management Plan should be withdrawn and rehabilitation measures detailed in the MOP (November 2015 to October 2022) implemented.	The Rehabilitation and Closure Management Plan is an appendix within the Mine Operations Plan and will be removed during the next revision of the mine operations plan.	The current MOP (November 2015 to October 2022) was approved on 23 December 2015.
REC-2016-20	Commence characterisation of topsoils and subsoils to be used for rehabilitation at the earliest opportunity to ensure successful revegetation.	Records of soil characterisation and vegetation communities have been retained from the EIS ecology studies.	Complete.

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REC-2016-21	WCS should continue to identify areas not required for operations and rehabilitate these, even for temporary rehabilitation, to reduce the potential for dust and soil erosion.	<p>On the 3 June 2015 Centennial submitted a copy of the Phase 2 Land Contamination Report to the EPA and has provided further follow up information in March 2016.</p> <p>Centennial shall commence preliminary works at Kerosene Vale in accordance with the objectives of the Rehabilitation and Closure Plan.</p> <ul style="list-style-type: none"> • Dispose of inert waste material at a licensed waste facility • Finalise the 2013 draft asbestos assessment report. • Undertake soil testing and characterisation to determine soil additives and fertiliser requirements • Progressively revegetate the stockpiles using direct sowing techniques 	<p>Preliminary works at Kerosene Vale will be completed by 30 June 2017.</p> <p>All rehabilitation works at Kerosene Vale nominated within the approved Mining Operations Plan (MOP) will be completed by the end of the MOP term, October 2022.</p>
REC-2016-22	Surrender existing development consents and approvals for the site in accordance with section 104A of the EP&A Act as required of the condition unless the Director General agrees another time.	Consultation with Energy Australia commenced in April 2016. The surrender of the consent will be submitted once a signed agreement from the landowner to surrender the existing consent has been completed.	Centennial have in-principle agreement with the landholder and expect a resolution by 30 June-2016.
REC-2016-23	Disturbed areas that aren't required for everyday use should be progressively rehabilitated	<p>On the 3 June 2015 Centennial submitted a copy of the Phase 2 Land Contamination Report to the EPA and has provided further follow up information in March 2016.</p> <p>Centennial shall commence preliminary works at Kerosene Vale in accordance with the objectives of the rehabilitation and closure plan.</p> <ul style="list-style-type: none"> • Dispose of inert waste material at a licensed waste facility • Finalise the 2013 draft asbestos assessment report. • Undertake soil testing and characterisation to determine soil additives and fertiliser requirements • Progressively revegetate the stockpiles using direct sowing techniques 	<p>Preliminary works at Kerosene Vale will be completed by 30 June 2017.</p> <p>All rehabilitation works at Kerosene Vale nominated within the approved Mining Operations Plan (MOP) will be completed by the end of the MOP term, October 2022.</p>
REC-2016-24	Consider setting targets to demonstrate all "reasonable and feasible measures to minimise the release of GHG emissions from the site are considered.	Centennial exceeds the controlling corporation emissions threshold (50,000 CO ₂ eT) and therefore is required to report its greenhouse gas (GHG) emissions, energy used and produced from all facilities in accordance with the NGER Act. This is termed a NGER section 19 Energy and Emissions Report (NGER Report) and is submitted to the Clean Energy Regulator (CER). The NGER Report includes all of the greenhouse emissions from each facility under the operational control of entities of Centennial. GHG emissions are calculated from input data from facilities (mine sites, support services, offices). These emissions are reported as Scope 1 (direct) and Scope 2 (indirect), giving rise to total GHG emissions, energy consumed and energy produced for each financial year reporting period.	Ongoing annual reporting.
REC-2016-25	Implement a program to regularly review the extent of disturbed areas to ensure all disturbed areas not required for production are rehabilitated or stabilised	Regular inspection of the REA domain is undertaken to assess the potential for further revegetation works. Other domain areas are generally static and therefore no potential for progressive rehabilitation.	This review is undertaken annually as part of the Annual Return process.
REC-2016-26	If required by the EPA, or as part of establishing a separate EPL for WCS, modify licence limits for discharges from LDP-006 as appropriate.	Centennial's Western Coal Services currently operate in accordance with an existing Environmental Protection Licence EPL 3607. Centennial have initiated discussions with the Environment Protection Authority (EPA) in relation to applications for new EPL's for Centennial's Western Coal Services and Springvale Mine operations.	Centennial have commenced negotiations with the EPA regarding separation of the EPL. Timing is contingent on completion and submission of the Upper Cocks River Action and Monitoring Plan.

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REC-2016-27	Discuss with the EPA as to whether an investigation (far up stream and far down stream) into heavy metal contamination of sediments in Wangcol Creek of WCS is warranted.	On the 3 June 2015 Centennial submitted a copy of the Phase 2 Land Contamination Report to the EPA and has provided further follow up information in March 2016.	
REC-2016-28	Update the Water Management Plan to include a TARP for Lamberts Gully in accordance with ANZECC 2000 and Using the ANZECC Guidelines and Water Quality Objectives in NSW procedures (DECC 2006), or its latest version.	The current Water Management Plan contains a TARP for LDP06 that was prepared in accordance with ANZECC 2000 and Using the ANZECC Guidelines and Water Quality Objectives in NSW procedures.	Complete.
REC-2016-29	Ensure the revised Water Management Plan includes strategies and measures for the diversion of clean and dirty water around disturbed areas, as far as is reasonable and feasible.	Strategies and measures for the diversion of clean and dirty water around disturbed areas, as far as is reasonable and feasible will be incorporated in the Water Management Plan.	The design for separation of clean and dirty water will be completed August 2016.
REC-2016-30	Revise the existing site inspection to verify compliance with Managing Urban Stormwater: Soils and Construction - Volume 1 and Volume 2E Mines and Quarries, or its latest version.	Gap analysis of the existing inspection sheet will be undertaken against the Managing Urban Stormwater: Soils and Construction - Volume 1 and Volume 2E Mines and Quarries, or its latest version.	July 2016.
REC-2016-31	Ensure that the recommendations provided in the 2012, 2013 and 2014 Rehabilitation Monitoring Report for Selected Centennial Mine Sites, Lithgow are implemented.	The recommendations will be incorporated into future revegetation programs as required.	As required.
REC-2016-32	Confirm with DP&E as to whether this condition (to improve the riparian habitat of Wangcol Creek for at least 100 metres downstream of the proposed Link haul road bridge crossing of the creek) applies if the link haul road bridge is not constructed.	Centennial is supportive of improving riparian habitat of Wangcol Creek for at least 100 metres.	To be determined prior to detailed design of the Link haul road bridge, if this component proceeds.
REC-2016-33	Ensure the Biodiversity Management Plan is sufficient to achieve biodiversity objectives for the undisturbed and rehabilitated areas given the Rehabilitation and Closure Management has been superceded by the 2015 - 2022 MOP.	The Rehabilitation and Closure Plan is an appendix of the Mine Operations Plan and will be retained until the next revision of the Mine Operations Plan.	NA
REC-2016-34	Ensure the Annual Review reports on the on the effectiveness of waste minimisation and management measures in the Annual Review including a detailed breakdown of waste disposal.	Further analysis including a breakdown of waste disposal will be included in the next annual review.	December 2016.
REC-2016-35	Continue progressive rehabilitation of disturbed areas to minimise the total area exposed for dust.	<p>On the 3 June 2015 Centennial submitted a copy of the Phase 2 Land Contamination Report to the EPA and has provided further follow up information in March 2016.</p> <p>Centennial shall commence preliminary works at Kerosene Vale in accordance with the objectives of the Rehabilitation and Closure Plan.</p> <ul style="list-style-type: none"> • Dispose of inert waste material at a licensed waste facility • Finalise the 2013 draft asbestos assessment report. • Undertake soil testing and characterisation to determine soil additives and fertiliser requirements • Progressively revegetate the stockpiles using direct sowing techniques 	<p>Preliminary works at Kerosene Vale will be completed by 30 June 2017.</p> <p>All rehabilitation works at Kerosene Vale nominated within the approved Mining Operations Plan (MOP) will be completed by the end of the MOP term, October 2022.</p>
REC-2016-36	Commence progressive rehabilitation at Kerosene Vale {Domain 6} in accordance with Section 9.6 of the Rehabilitation and Closure Management Plan.	<p>On the 3 June 2015 Centennial submitted a copy of the Phase 2 Land Contamination Report to the EPA and has provided further follow up information in March 2016.</p> <p>Centennial shall commence preliminary works at Kerosene Vale in accordance with the objectives of the Rehabilitation and Closure Plan.</p> <ul style="list-style-type: none"> • Dispose of inert waste material at a licensed waste facility • Finalise the 2013 draft asbestos assessment report. • Undertake soil testing and characterisation to determine soil additives and fertiliser requirements • Progressively revegetate the stockpiles using direct sowing techniques 	<p>Preliminary works at Kerosene Vale will be completed by 30 June 2017.</p> <p>All rehabilitation works at Kerosene Vale nominated within the approved Mining Operations Plan (MOP) will be completed by the end of the MOP term, October 2022.</p>

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REC-2016-37	Ensure there is consistency in naming convention of areas of the WCS in the management plans (i.e. Domains).	Agreed	Ongoing – each document review.
REC-2016-38	Ensure the naming convention for sensitive receivers is the same across all plans	Agreed	Ongoing.
REC-2016-39	Ensure that there is consistency in the reporting and presentation of results in the Monthly Environmental Reports including the provision of EPL criteria to allow the reader to easily interpret results.	The reporting template for Western Coal Services has been updated for the March 2016 report.	Complete March 2016 and ongoing.
REC-2016-40	Prior to the commencement of trucks using the haul roads investigate and implement measures to prevent exceedances of approved noise criteria.	<p>The previous weather station did not provide real time data for the identification of wind speeds greater than 3 m and temperature inversion conditions greater than 3°C. The current weather station installed on the 11 July 2015 provides real time data for the determination of adverse weather conditions.</p> <p>To facilitate our understanding of the environment, Centennial has:</p> <ul style="list-style-type: none"> Installed and commissioned a noise compass which provides the most accurate directional noise monitoring for the management of site activities such that operations can be modified to respond to potential noise exceedances before they occur. Commenced the revision of the Western Coal Services Noise Impact Assessment to include an analysis of the contribution by source and project to each sensitive receptor. 	Undetermined. 3-months prior to recommencement of trucking along haul roads.
REC-2016-41	Restrict access to the derelict portal building at Kerosene Vale.	The portal building will be secured to prevent unauthorised access.	July 2016
REC-2016-42	It is recommended that site review the requirements of the Sydney Water Catchment Management Act 1998 and ensure that all conditions of the Act as relevant to operations at WCS are being complied with. Refer to other recommendations regarding water management as relevant.	To be included in the next revision of the Regional Water Management Plan.	Water management at Western Coal Services is included in investigations under the Upper Cocks River Action and Monitoring Plan, to be submitted to the Secretary for approval by 30 September 2016. This will culminate in the development of a revised Water Management Plan for the Western Coal Services Site anticipated to be completed by 31 December 2016.
REC-2016-43	Ensure issues such as water, noise and air quality management; biodiversity conservation; rehabilitation and future land uses are included in future consultation and engagement exercises with proponents /applicants of other approved developments/projects on the WCS such as Energy Australia. Consider further environmental initiatives between WCS and Energy Australia with the aim of maximising environmental outcomes.	Centennial has monthly production and operational meetings with Energy Australia. Land management issues raised at this forum are investigated and completed.	Ongoing – monthly.
REC-2016-44	In Consultation with relevant agencies, consider relocating DG3 to a location more representative of background conditions at that location should long- term criteria exceedances for deposited dust continue.	The relocation of DG3 will be discussed with the EPA.	This will be done in conjunction with the licence separation, which is dependent on the Upper Cocks River Action and Monitoring Plan.